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动物分类学报

TWO NEW SPECIES OF THE GENUS XENOCATANTOPS (ORTHOPTERA, ACRIDOIDEA, CATANTOPIDAE) FROM CHINA

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Abstract Two new species i. e. *Xenocatantops taiwanensis* sp. nov. and *X. longipennis* sp. nov. from Taiwan, China are described in this paper. *X. taiwanensis* sp. nov. is similar to *X. sauteri* (Ramme, 1941), but differs from latter: 1) tegmina longer, extending over the midpoint of hind femur distinctly, reaching to the midpoint of epiproct; 2) frontal ridge with longitudinal sulcus, both sides almost parallel, narrowed slightly in the middle; 3) prosternal process cylindrical, apex rounded. *X. longipennis* sp. nov. is allied to *X. luteitibia* Zheng *et* Jiang, 2002, but differs in hind femur robust, the length about 3.7 times maximum width; length of a segment in the middle of antennae 1.1-1.4 times width; head and pronotum without small black spots. A key to known species of the genus *Xenocatantops* from China is given. Type specimens are deposited in National Museum of Natural Science (NMNH), Taichung, Taiwan, China.

Key words Orthoptera, Acridoidea, Catantopidae, *Xenocatantops*, new species, China.

The genus *Xenocatantops* was erected by Dirsh in 1953 and the type species is *Xenocatantops humilis* (Audinet-Serville, 1839) [= *Acridium humile* Audinet-Serville, 1839]. Up to the present, the genus contains 11 species, among them 8 species are distributed in South Asia, the other 3 species are distributed in Africa.

In the present paper, two new species *Xenocatantops taiwanensis* sp. nov. and *Xenocatantops longipennis* sp. nov. are described from Taiwan, China. A key to known species of the genus *Xenocatantops* Dirsh, 1953 from China is given.

The type specimens are deposited in National Museum of Natural Science (NMNH), Taichung, Taiwan, China.

1 *Xenocatantops taiwanensis* **sp. nov.** (Figs. 1-3)

Type materials. Holotype male, Taiwan, Pingtung, Manchou (21°02′N, 120°50′E), 17 Fab. 1992, K. W. Huang (NMNH).

Male Body median in size. Head shorter than pronotum. Front slightly sloping backward. Frontal ridge with longitudinal sulcus, both sides almost parallel, narrowed slightly in the middle. Eyes oval, longitudinal diameter about 1.6 times as long as minimum diameter, and 2.4 times length of subocular suture. Antennae filiform, shorter, 22 segmented, not reaching to the posterior margin of pronotum, length of a segment in the middle of anntenae 1.1 times width. Median carina of pronotum distinct, between the fore and hind transverse sulci indistinct, cut by three transverse sulci, prozona about 1.1 times as long as metazoan in length, anterior margin of pronotum straight, posterior margin of pronotum obtuse angulated. Prosternal process cylindrical, apex rounded. Length of interspace of mesosterum 1.8 times minimum width. Lateral lobes of metasternum contiguous. Tegmina shorter, reaching to the midpoint of epiproct. Hind femur robust, the length 3.3 times its width, median keel of hind femur on the upper side serrated, tip of lower kneelobe rounded. Posterior tibia with 10 or 11 spines on inner side and 9 spines on outer side, outer apical spine absent. Arolium large, longer than claw. Tympanal organ developed, tympanic cavity ellipse. Epiproct tongue-shaped, basal half part with median longitudinal sulcus, both sides with concave on basal part. Cercus longer, apex incurved. Subgenital plate short, conical, rounded at end.

Body yellowish-brown. Eyes brown. Antennae yellowish-brown. Tegmina brown. Fore and median legs yellowish-brown. Hind femur yellow, upper and outer sides with two dark bands, inner side orange red. Hind tibia orange red.

Measurements. Length of body: male 21.3 mm; length of tegmina: male 12.4 mm; length of hind femur: male 12.7 mm.

Female unknown.

Diagnosis. The new species is similar to *X. sauteri* (Ramme, 1941) but differs from latter in 1) tegmina longer, extending over the midpoint of hind femur distinctly, reaching to the midpoint of epiproct; 2) frontal ridge with longitudinal sulcus, both sides almost parallel, narrowed slightly in the middle; 3) prosternal process cylindrical, apex rounded.

Etymology. The specific epithet is derived from

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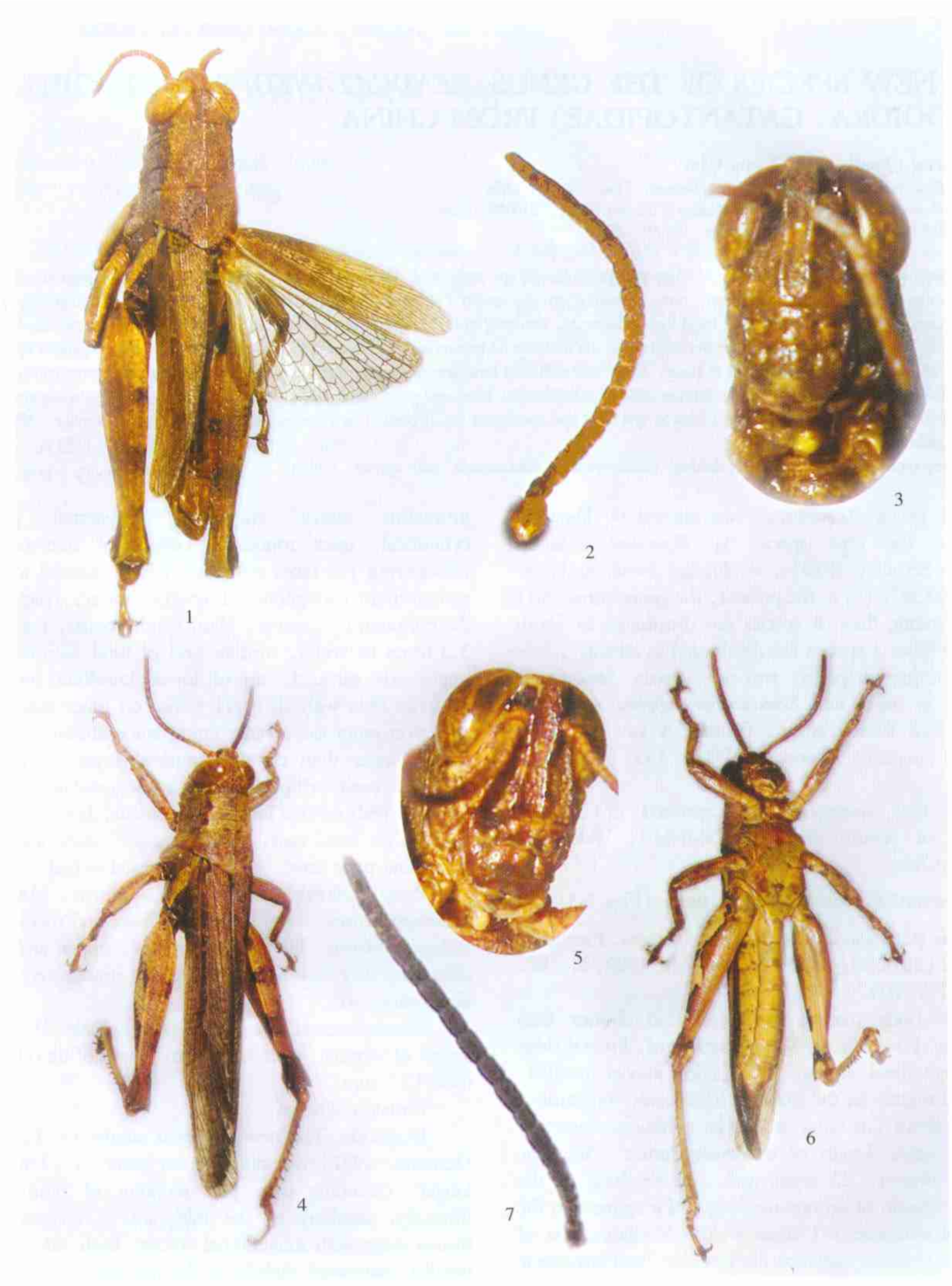

Figs. 1-3. *Xenocatantops taiwanensis* sp. nov., male. 1. Dorsal view. 2. Antennae. 3. Head. Figs. 4-7. *Xenocatantops longipennis* sp. nov., male. 4. Dorsal view. 5. Head. 6. Ventral view. 7. Antennae.

Taiwan, the type locality.

2 Xenocatantops longipennis **sp. nov.** (Figs. 4-7)

Male. Body median in size. Head shorter than pronotum. Front slightly sloping backward. Frontal ridge with longitudinal sulcus, narrowed in the middle. Eyes oval, longitudinal diameter about 1.8 times as long as minimum diameter, and 2.3 times length of subocular suture. Antennae filiform, shorter, 22 segmented, extending over posterior margin of pronotum, length of a segment in the middle of antennae 1.1-1.4 times width. Median carina of pronotum distinct, between the fore and hind transverse sulci indistinct, cut by three transverse sulci, prozona about 1.1 times metazoan in length, anterior margin of pronotum straight, posterior margin of pronotum obtuse angulated. Prosternal process cylindrical, apex rounded. Length of interspace of mesosterum 1.7 times minimum width. Lateral lobes of metasternum contiguous. Tegmina longer, extending beyond the end of hind femur and equal to the length of pronotum for the part of beyond. Hind femur robust, the length 3.7 times its width, median keel of hind femur on the upper side serrated, tip of lower kneelobe rounded. Posterior tibia with 10 or 11 spines on inner side and 8 or 9 spines on outer side, outer apical spine absent. Arolium large, longer than claw. Tympanal organ present, tympanic cavity ellipse. Epiproct tongue-shaped, basal half part with median longitudinal sulcus. Cercus longer, apex incurved. Subgenital plate short, conical, rounded at end.

Body yellowish-brown. Eyes brown. Antennae yellowish-brown. Tegmina brown. Fore and median legs yellowish-brown. Hind femur yellow, upper and outer sides with two indistinct dark bands, inner side yellowish-brown. Hind tibia yellowish-brown.

Type materials. Holotype male, Taiwan, Nantuo, Jenai, Nanshanhsi (24°00′N, 121°05′E), 11 Oct. 1999, H. T. Shih (NMNH).

Measurements. Length of body: male 20.1 mm; length of tegmina: male 19.2 mm; length of hind femur: male 10.5 mm.

Female unknown.

Diagnosis. The new species is similar to *X. luteitibia* Zheng *et* Jiang, 2002, but differs in hind femur robust, the length about 3.7 times maximum width, length of a segment in the middle of antennae 1.1-1.4 times width, head and pronotum without small black spots.

Etymology. The species is named for the longer tegmina and *longi-pennies* in Latin means long tegmina.

Key to known species of genus Xenocatantops **Dirsh, 1953 in China**

1 (8) Tegmina longer, extending over the end of hind femur

2 (5) Inner side of hind femur and hind tibia yellowish-brown

3 (4) Hind femur slender, the length 5 times maximum width. Length of a segment in the middle of antennae 1.5-2 times width. Head and pronotum with many small black spots. China (Guangxi, Yuanbaoshan type locality) …X. luteitibia **Zheng et Jiang, 2002**

4 (3) Hind femur robust, the length about 3.7 times maximum width. Length of a segment in the middle of antennae 1.1-1.4 times width. Head and pronotum without small black spots. China (Taiwan Nantuo) ………………………………… X. longipennis **sp. nov.**

5 (2) Inner side of hind femur and hind tibia orange red

6 (7) Body comparatively slender. Tegmina longer, distinctly extending beyond the end of hind femur and more than the half of pronotum in length for the part of beyond. Antennae slender, length of segment of the middle antennae about 1.8-2.0 times as long as width. Prosternal process conical, apex acuter. China, Indonesia (Java type locality), Nepal, Bhutan, India, Burma, Bangladesh, Viet Nan, Sri Lanka, Malay, Thailand, Philippines, New Guinea …………………………………………… X. humilis **(Audiines-Serville, 1839)**

7 (6) Body comparatively thick and short. Tegmina shorter, slightly extending beyond the end of hind femur and less than half of pronotum in length for the part of beyond. Antennae shorter, length of segment of the middle antennae about 1.1-1.5 times as long as width. Prosternal process obtusely conical or nearly cylindrical. China (Jiangsu type locality), Nepal, Bhutan, Northern India ……………………… X. brachycerus **(C. Willemse, 1932)**

8 (1) Tegmina shorter, not reaching to the end of hind femur

9 (10) Tegmina extending over the midpoint of hind femur and reaching to the midpoint of epiproct. Frontal ridge with longitudinal sulcus, both sides almost parallel, narrowed slightly in the middle. Prosternal process cylindrical, apex rounded. China (Taiwan Pingtung) ……………………………………… X. taiwanensis **sp. nov.**

10 (9) Tegmina not or just reaching to the midpoint of hind femur. Frontal ridge without longitudinal sulcus, from median ocelus narrowed downward. Prosternal process cylindrical, apex acuter. China (Taiwan, Taitung, Taihauroku type locality) ……………………………………… X. sauteri **(Ramme, 1941)**

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中国外斑腿蝗属两新种 (直翅目, 蝗总科, 斑腿蝗科, 斑腿蝗亚科)

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摘 要 记述了采自中国台湾斑腿蝗科外斑腿蝗属 *Xenocatantops* Dirsh, 1953 的 2 新种。台湾外斑腿蝗 *X. taiwanensis* sp. nov. 近似 *Xenocatantops sauteri* (Ramme, 1941), 区别特征为前翅较长, 超过后足股节中部, 到达肛上板的中点; 颜面隆起具纵沟, 两侧近平行, 中部微缩狭; 前胸腹板突圆柱形, 端圆形。长翅外斑腿蝗 *X. longipennis* sp. nov. 近似 *Xenocatantops luteitibia* Zheng *et* Jiang, 2002, 区别特征为后足股节粗壮, 长为最宽处的 3.7 倍; 触角中段一节的长为宽的 1.1~ 1.3 倍; 前胸背板缺小黑点。并附外斑腿蝗属中国已知种的检索表。模式标本保存于国立自然科学博物馆, 台中。

关键词 直翅目, 蝗总科, 斑腿蝗科, 外斑腿蝗属, 新种, 中国.
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